



80632RLW  
Customer No. 01333

*JTW* *DA* *RC2*  
*P*

**THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Jiebo Luo, et al.

DIGITAL IMAGE PROCESSING  
SYSTEM AND METHOD FOR  
EMPHASIZING A MAIN SUBJECT  
OF AN IMAGE

Serial No. 09/642,533

Filed 18 August 2000  
Mailstop: Petition to Revive  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA. 22313-1450

Sir:

Group Art Unit: 2621

Examiner: Ishrati Sherali

I hereby certify that this correspondence is being deposited  
today with the United States Postal Service as first class  
mail in an envelope addressed to Commissioner For  
Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Anita Marie Barker*

Anita Marie Barker

*December 22, 2005*

Date

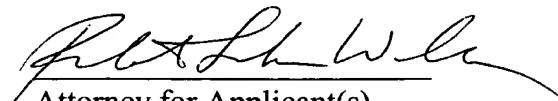
**PETITION UNDER 37 C.F.R. 1.181 FOR WITHDRAWAL OF NOTICE OF  
ABANDONMENT/REVIVAL AND FOR ENTRY OF REQUEST FOR  
CONTINUED EXAMINATION AND AMENDMENT**

On October 26, 2005, a Decision on Appeal (copy attached hereto), as to the above-identified application, was mailed sustaining the rejection of the claims and entering new grounds of rejection under 37 CFR 41.50 and providing that the Appellant must take appropriate action, within two months from the date of the decision. On November 30, 2005, a Notice of Abandonment (copy attached hereto) was mailed indicating an abandonment of the above-indicated application and erroneously stating that "the period for seeking court review of the decision had expired". Filed herewith, within two months of the Decision on Appeal, is a Request for Continued Examination and Amendment responsive to the rejections in the above-indicated application.

This petition requests withdraw of the notice of abandonment of the above-identified application and entry of the above-identified Request for Continued Examination and Amendment. In the alternative, should it be

determined that abandonment has occurred, this petition is filed (within one year) for revival of the above-identified application as unintentionally abandoned and entry of the above-identified Request for Continued Examination and Amendment.

Respectfully submitted,

  
Attorney for Applicant(s)  
Registration No. 30,700

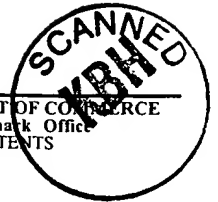
Robert Luke Walker/amb  
Rochester, NY 14650  
Telephone: (585) 588-2739  
Facsimile: (585) 477-1148

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/642,533

08/18/2000

Jiebo Luo

80632

7789

1333

7590

11/30/2005

BETH READ  
PATENT LEGAL STAFF  
EASTMAN KODAK COMPANY  
343 STATE STREET  
ROCHESTER, NY 14650-2201

**EASTMAN KODAK CO.**

DEC - 5 2005

**PATENT LEGAL STAFF**

EXAMINER

SHERALI, ISHRAT I

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 11/30/2005



Please find below and/or attached an Office communication concerning this application or proceeding.

# Notice of Abandonment

Application No.

09/642,533

Examiner

Sherali Ishrat

Applicant(s)

LUO ET AL.

Art Unit

2621

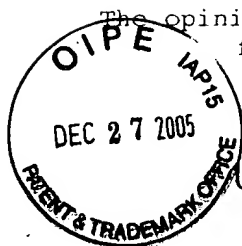
-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☐ Applicant's failure to timely file a proper reply to the Office letter mailed on \_\_\_\_\_.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☐ A reply was received on \_\_\_\_\_ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☐ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$ \_\_\_\_\_ is insufficient. A balance of \$ \_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$ \_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$ \_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☒ The decision by the Board of Patent Appeals and Interference rendered on 10/26/2005 and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☐ The reason(s) below:

JOSEPH MANCUSO  
SUPERVISORY PATENT EXAMINER

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.



The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*RLW*  
EASTMAN KODAK CO.

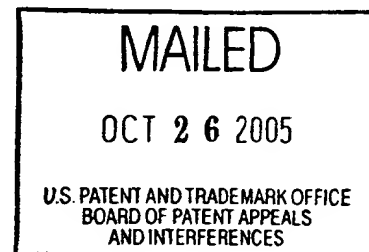
OCT 31 2005

PATENT LEGAL STAFF

Ex parte JIEBO LUO and ROBERT T. GRAY

Appeal No. 2005-2003  
Application No. 09/642,533

ON BRIEF



Before THOMAS, BARRY, and MACDONALD, Administrative Patent Judges.  
MACDONALD, Administrative Patent Judge.

Entered by JMD

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 91-130. Claims 1-90 have been canceled.

Invention

Appellants' invention relates to a method and system of modifying an image made up of pixels by automatically identifying a main subject of the image and altering pixel values to emphasize the main subject. This is accomplished by, among other techniques, altering pixel values in the main subject or altering pixel values in the background, or both.

Appellants' specification at page 2, lines 7-12.

Claim 91 is representative of the claimed invention and is reproduced as follows:

91. A method for modifying an image having pixels, comprising the steps of:  
automatically identifying a main subject of the image, and  
automatically altering pixel values of said image to emphasize said main subject, said  
altering following said identifying.

#### References

The references relied on by the Examiner are as follows:

Luo et al.	6,504,951	January 7, 2003 (Filed November 29, 1999)
------------	-----------	--

#### Rejections At Issue

Claims 91-130 stand rejected under 35 U.S.C. § 102 as being anticipated by Luo.

Throughout our opinion, we make references to the Appellants' briefs, and to the Examiner's Answer for the respective details thereof.<sup>1</sup>

---

<sup>1</sup>Appellants filed an appeal brief on August 27, 2004. Appellants filed a reply brief on March 7, 2005. The Examiner mailed an Examiner's Answer on January 3, 2005.

### OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellants and the Examiner, for the reasons stated *infra*, we affirm the Examiner's rejection of claims 91-130 under 35 U.S.C. § 102.

We also use our authority under 37 CFR § 41.50(b) to enter a new grounds of rejection of claims 91-105 and 121-130. The basis for this is set forth in detail below.

Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the brief have not been considered. We deem such arguments to be waived by Appellants [see 37 CFR § 41.37(c)(1)(vii) effective September 13, 2004 replacing 37 CFR § 1.192(a)].

Appellants have indicated that for purposes of this appeal the claims stand or fall together. See page 2 of the brief. We will, thereby, consider Appellants' claims as standing or falling together, and we will treat claim 91 as representative of all the claims.

**I. Whether the Rejection of Claims 91-130 Under  
35 U.S.C. § 102 is proper?**

It is our view, after consideration of the record before us, that the disclosure of Luo does fully meet the invention as recited in claims 91-130. Accordingly, we affirm.

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. See *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

With respect to independent claim 91, Appellants present two arguments at page 3 of the brief, and reiterates these arguments at page 1 of the reply brief. Firstly, Appellants argue, "Luo et al. does not disclose automatically identifying a main subject of the image," and secondly, Appellants argue, "Luo et al. does not disclose automatically altering pixel values of said image to emphasize said main subject, said altering following said identifying." Both of Appellants' arguments rely on constrained readings of the claim steps that are not warranted based on the actual claim language. Therefore, we find the arguments unpersuasive.



As to the first argument, we find that Luo does not teach "excluding the sky region in detecting the main subjects in the image." Rather, Luo teaches, "sky regions can usually be excluded because they are likely to be part of the background." (See Luo at col. 1, lines 49-50.) We find that an appropriate reading of this teaching is that there exist a small percentage of images where the sky is the main subject.

Additionally, Appellants' own specification contains plural definitions of the term "main subject" of which at least one definition reasonably allows for sky regions being a main subject of an image. At page 13, line 23, through page 4, line 4, of the specification, Appellants present two definitions of the term "main subject." The first definition indicates that the term is highly subjective as it is "in the opinion of each observer." That is, any object in the image could be picked by an observer to be the "main subject" based on their own personal preferences. The second definition indicates a more objective term by making it a "binary decision ... [that] can be obtained by using an appropriate threshold on [a] belief map." We note that this second definition still does not eliminate the aspect that the object to be identified is subjective to the extent that the observer must first decide what they want to identify using the binary decision process. Appellants' third definition of the

term is found at pages 10-13 of the specification. Here Appellants set forth a very specific objective process for determining whether a region in an image is a "main subject" based on degree of centrality, borderiness, and chrominance space distribution.

We find that the "automatically identifying a main subject of the image" in claim 91 is met by Luo's teaching of color classification by item 201 and a threshold operation (72) to produce a binary map of belief values. (See Luo at col. 8. line 19, through col. 9, line 32.) This process of identifying a sky pixel versus a non-sky pixel is consistent with Appellants' definition of "main subject" as a binary decision obtained by using an appropriate threshold on a belief map. Appellants position that an observer is "excluded" from selecting sky as their main subject upon which to perform the binary decision process is simply not supported by the claim language nor by the evidence before this panel.

As to Appellants' second argument, we find Luo teaches, "automatically altering pixel values of said image to emphasize said main subject" and we find Luo teaches "said altering following said identifying." We address the second point first. Appellants argue that Luo's pixel elimination steps occur as part of finding the sky regions. (Brief at page 4) We agree.

However, Appellants then argue "[s]ince the process is intended to find sky regions, it by definition can not take place after the sky has been identified." We do not agree. Appellants' argument overlooks the fact that Luo teaches a multi-stage identification process. (See Luo at column 5, lines 2-3.) At the end of stage one, Luo has identified a sky pixel versus a non-sky pixel using a binary map (see item 73). This is a complete identification stage that meets the identifying step of claim 91. Nothing in the claim precludes the altering occurring as part of a second or third stage identification process where the first identification is further refined. (See Luo at column 10, lines 5 and 49.) Appellants' claim language only requires "said altering following said identifying" not that said altering follow any and all identifying.

As to the first point of the second argument, Appellants argue that Luo's eliminating other regions does not emphasize the sky regions within the context of the present invention. We find this argument unpersuasive. Appellants' contention that the claim requires altering the main subject (sky region) to emphasize the main subject is not supported by the claim. The second step of claim 91 requires "altering pixel values of said image" with the result "to emphasize said main subject." Consistent with the claim language, we find that the emphasizing

can be accomplished by altering the pixels of other regions to decrease their emphasis (and thus increase the relative emphasis of the main subject (sky)). Nothing in the claim language requires altering the pixels of the main subject to increase its emphasis.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 102.

**II. Rejection of Claims 91-105 and 121-130 Under  
37 CFR § 41.50(b).**

We make the following new grounds of rejection using our authority under 37 CFR § 41.50(b).

Claims 91-105 and 121-130 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the necessary structural connections. A claim which fails to interrelate essential elements of the invention as defined by applicant(s) in the specification may be rejected under 35 U.S.C. 112, second paragraph, for failure to point out and distinctly claim the invention. **See In re Venezia**, 530 F.2d 956, 957-58, 189 USPQ 149 (CCPA 1976); **In re Collier**, 397 F.2d 1003, 1105, 158 USPQ 266, 267 (CCPA 1968).

All of Appellants method claims share the same problem in that they are not limited to a machine implemented method. Normally no such limitation is required. However, in the situation before us, Appellants have specifically stated that the invention "provides the fundamental advantage of eliminating the need for manual intervention." See Appellants' specification at lines 1-2 of page 6. Appellants' method claims are not currently so limited.

We do not read the claim language "automatically" as requiring a machine. For example, the "automatically identifying" in line 3 of claim 91 does not require a machine as it also covers a manual operation performed in a rote or mechanical fashion by a human. We also note that the mere complexity of the steps in Appellants' method claims does not in itself require that a machine perform them.

### **Conclusion**

In view of the foregoing discussion, we have sustained the rejection under 35 U.S.C. § 102 of claims 91-130.

We have entered a new grounds of rejection against claims 91-105 and 121-130 under 37 CFR § 41.50(b).

As indicated *supra*, this decision contains a new grounds of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004).

37 CFR § 41.50(b) provides that, "[a] new grounds of rejection pursuant to this paragraph shall not be considered final for judicial review."

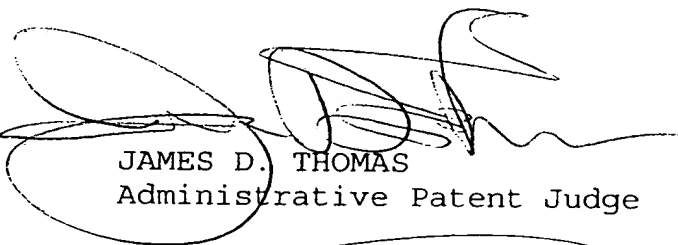
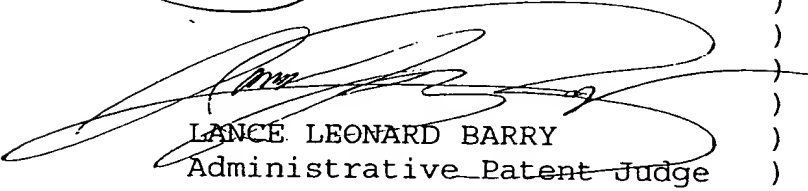

37 CFR § 41.50(b) also provides that the Appellant, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 CFR § 1.197 (b) (amended effective September 13, 2004)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner ...

(2) Request that the proceeding be reheard under 37 CFR § 41.52 by the Board upon the same record ...

No time period for taking any subsequent action in  
connection with this appeal may be extended under  
37 CFR § 1.136(a)(1)(iv).

**AFFIRMED**  
**37 CFR § 41.50(b)**

	)	
JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
LANCE LEONARD BARRY	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS
	)	AND
	)	INTERFERENCES
	)	
ALLEN R. MACDONALD	)	
Administrative Patent Judge	)	

ARM/kis

Appeal No. 2005-2003  
Application No. 09/642,533

Page 12

BETH READ  
PATENT LEGAL STAFF  
EASTMAN KODAK COMPANY  
343 STATE STREET  
ROCHESTER, NY 14650-2201